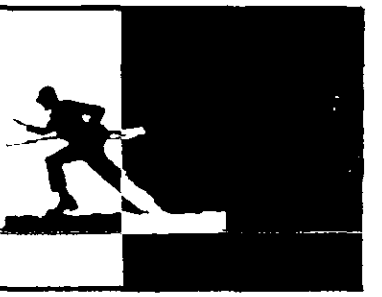
PROFESSIONAL FORUM



Logistical Planning

MAJOR GREGORY C. VOGEL

Like the tactician in planning for tactical operations, the logistician must have a set of guidelines or principles to follow (or at least to consider) when planning support for these operations. And like the Principles of War, there are nine Principles of Logistics (listed in FM 701-58, Planning Logistic Support for Military Operations). The amount of risk the logistician and the commander decide to take and the type of mission to be accomplished will determine the order of priority assigned to these principles. They are the following:

Logistics Intelligence. Effective logistical planning requires that accurate and timely logistics information be obtained, analyzed, and made available to commanders.

Objective. Logistical support must be directed toward a clear and attainable goal—the support of the designated mission.

Generative Logistics. The logistician must apply initiative, knowledge, and innovative methods in order to improve the logistical system.

Interdependence. All logistical functions are related to some degree; no one function can operate effectively if the others have not also been considered.

Simplicity. Systems of support should be simple and direct. Complex plans will only increase the probability that something will go wrong.

Timeliness. Support must be provided in the right amount and at the proper time and place to accomplish the mission.

Forward Impetus. Logistical support must be pushed as far forward as possible to the combat units. Little supply point distribution should be used.

Cost Effectiveness. The efficient management of logistical resources is essential as new programs and the funds to support them become more and more scarce.

Security. To preserve resources and thus ensure sustained combat capabilities, logisticians must maintain the security of all logistical areas and supplies.

In addition to these principles, a logistician must keep in mind those factors that can influence combat service support (CSS) requirements for each different type of military operation. These logistical factors are crucial in providing a basis from which all CSS will occur and for developing a rational, timely support plan.

The following are the factors that can influence CSS requirements:

- The number and type of troops to be supported.
- The quantity, type, and distribution of equipment.
- The level of support to be provided (organizational, direct support).
- When the force will be deployed.
- The climate and terrain characteristics.
- Whether a strategic or tactical deployment will be used.
- The status and availability of resources (local, allied, carried on deployment).
- The size of the area of operations.
- The attitudes, availability, and capabilities of local civilians and prisoners of war.
- The availability, capabilities, and limitations of CSS units (division, corps).
- The enemy's capabilities.
- The medical evacuation policy.
- The self-sustaining capability of friendly forces.
- The levels of supply that will be carried by individuals and units (Class I, III, V, IX).
- The commander's priorities for support.
- The consumption factors for the type of operations being planned and the climatic conditions (FM 101-10-1).
- The weapon systems whose operability is critical to the success of the mission.
- The threat to CSS operations both forward and rear area.
- Any major tactical contingencies that may arise (future operations).
- The location of supporting and supported units.
- The security of the force.

In planning a location for the brigade support area (BSA), a logistician must consider certain other factors as they pertain to the type of unit being supported. With light infantry, for example, the general rule of thumb for the distance between the FLOT (forward line of own

troops) and the BSA is about 10 to 15 kilometers. The subordinate unit field trains normally set up within the BSA, while their combat trains generally set up three to five kilometers from the FLOT.

Consideration of the following factors will help a logistician as he looks for appropriate areas in which to set up his BSA, or even a combat trains site:

- Defensible terrain.
- Sufficient space to permit dispersion.
- Firm ground to support the weight of vehicles.
- A water source (if possible).
- A suitable helicopter landing site.
- A good road network (primary and alternate routes in and out).
- Adequate cover, concealment, and drainage.

A logistician must also think about the different needs a unit will have depending upon the type of tactical operation in which it is going to be involved. (Some of these needs are common to all types of operations, while others apply to one type only.) Each tactical mission must be looked at separately, of course, on the

LOGISTICAL CONSIDERATIONS

OFFENSIVE OPERATIONS

- Plan for forward positioning of essential CSS supplies and services (ammunition, fuel, oils, lubricants, food, maintenance).
- Plan for increased POL consumption.
- Move/resupply at night whenever possible.
- Plan for use of preplanned/preconfigured push packages of essential items.
- Plan for increased vehicle maintenance, especially over rough terrain.
- Plan for maximum use of forward mobile maintenance and support teams.
- Plan for maximum use of throughput distribution to company and platoon level.
- Plan for increased MRE consumption.
- Plan for use of airlift/airdrop for resupply.
- Plan for use of captured enemy supplies and equipment.
- Look for availability of natural water sources.
- Plan for intensified graves registration operations.
- Plan for adequate CSS primary and alternate communications.
- Carefully select primary and alternate supply routes.
- Upload as much material as possible.
- Don't give away tactical plan with CSS preparations.

STATIC DEFENSIVE OPERATIONS

- Stockpile supplies and equipment forward at successive defensive positions.
- Position CSS units out of the flow of the battle.
- Emphasize camouflage, cover, and concealment.
- Plan for self-defense against rear area control operations (RACO) threat.
- Be prepared to switch to offensive operations.
- Plan for high expenditures of ammunition.
- Plan for decreased use of fuel.
- Plan for decreased vehicle maintenance.
- Plan for increased Class IV material requirements.
- Consider repositioning CSS units farther to the rear to allow for maneuver of reserve.
- Plan for more tray packs during the preparation phase and then MREs during the execution phase.
- For covering force operations, plan for airdrop of supplies and for prepositioning of stocks and use of caches forward as well as on fall-back positions.
- Plan to resupply at night and during other periods of limited visibility.

DYNAMIC DEFENSIVE OPERATIONS

- Plan for increased POL consumption.
- Plan for increased vehicle maintenance.
- Minimize evacuation requirements; send maintenance teams forward to make repairs.
- Plan for preplanned/preconfigured push packages for resupply (Class I, III, V, IX, water).
- Plan for increased MRE consumption.
- Plan for increased airlift/airdrop for resupply.
- Carefully select primary and alternate resupply routes (different from tactical routes, if possible).
- Upload as much material as possible.
- Plan to resupply at night and during other periods of limited visibility whenever possible.

RETROGRADE OPERATIONS

- Plan to echelon CSS elements in depth and leapfrog them toward the rear during execution.
- Limit flow of supplies forward to combat-essential items.
- Evacuate all nonessential supplies and equipment early.
- Establish cache points along routes of withdrawal.
- Destroy all supplies and equipment (except for medical) that cannot be evacuated.
- Keep supply and evacuation routes open.
- Withdraw forward medical units as early as possible.
- Plan for alternate means of evacuating casualties.
- Use air evacuation as much as possible.
- Emphasize evacuation over treatment.
- Emphasize evacuation of equipment over forward repair.
- Plan to resupply and evacuate equipment at night and during other periods of limited visibility.
- Plan for and be alert to RACO threat.
- Don't give away the tactical plan with CSS preparations.

NBC OPERATIONS

- Plan for alternate methods of supply since lines of communication may be interrupted (container delivery, heavy drop, Army aviation, and the like).
- Plan for increased use of water and other decontaminants.
- Plan for medical augmentation and evacuation of a large number of patients.
- Plan for protection of equipment and supplies from contamination.
- Plan for rapid resupply of chemical protective equipment and supplies.
- Plan to rotate CSS personnel frequently during periods of moderate to heavy work rates while in NBC gear.
- Plan for processing NBC information rapidly to facilitate avoidance of contaminated areas.
- Ensure that CSS soldiers are well trained in decontamination and NBC survey procedures.

basis of METT-T (mission, enemy, terrain, troops, and time available), but the lists shown in the accompanying box can help a logistician prepare for the support of various types of missions. (These lists can be found in several logistical field manuals, but they have been brought together and modified for this article on the basis of numerous after action reports from field training, command post, and emergency deployment readiness exercises.)

Successful logistical operations require a great deal of planning and timely execution as well. The lists presented here are designed to stimulate the thought processes of the logistician as he tries to balance the tasks and resources he has been given. These lists should be used, modified, and updated as required.

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Aiming Circle Accuracy

CAPTAIN J. KEVIN MUILMAN

Accuracy is as critical for a mortar platoon as for any other combat unit, and it begins with the precise declination of the M-2 aiming circle.

In the U.S. Army Infantry School's Infantry Mortar Platoon Course at Fort Benning, Georgia, students are taught that the aiming circle is declinated using at least two distinct points (each at least 1,000 meters from the aiming circle) whose direction from the point the aiming circle is set on has been surveyed to an accuracy of plus or minus two mils.

In West Germany and away from the major U.S. training areas, however, declination points surveyed in mils are nonexistent, and mortar platoons are usually unable to declinate their aiming circles accurately. There are many surveyed points across the countryside, of course, but these points, published by the government of the Federal Republic of Germany in pamphlets called *Trigliste*, are all in longitude and latitude. The solution is a simple one, though—to declinate aiming circles accurately in Europe, longitude and latitude must be converted into the mil relationships that U.S. soldiers are trained to use.

When a direct support field artillery battalion is nearby, its survey data will give a mortar platoon leader all the declination information he will need. But when direct support battalions are decisively engaged or are not present, mortar platoons need to know how to make these conversions.

To convert longitude and latitude to mil relationships, therefore, a mortar platoon needs the following equipment: a 1:50,000 scale map of the area in which it is operating, a *Trigliste* for the area, a calculator, and a trigonometric functions table (if the calculator does not have trig functions on it).

First, through a map reconnaissance of the area, the mortar platoon leader chooses a surveyed point on which to set the aiming circle. (On most 1:50,000 scale maps of Europe, these surveyed points are represented by a small triangle with a point in the center marking the exact location of the surveyed point.) This point must have at least two other surveyed points within eyesight and be 1,000 meters or more from the aiming circle. These second two points are the distant aiming points.

By using the *Trigliste*, he determines the longitude and latitude of the aiming circle point and the two distant aiming points. He labels these points on the map with a point number and a map sheet number and references them in the *Trigliste* by these numbers. (For example, a point labeled "134/7522" is point number 134 on map sheet 7522.)

He then calculates the mil direction of each of the distant aiming points from the aiming circle separately. Each distant aiming point falls into one of four quadrants formed by the north-south and east-west grid lines that pass through the aiming circle point (Figure 1).

He draws a right triangle, making the

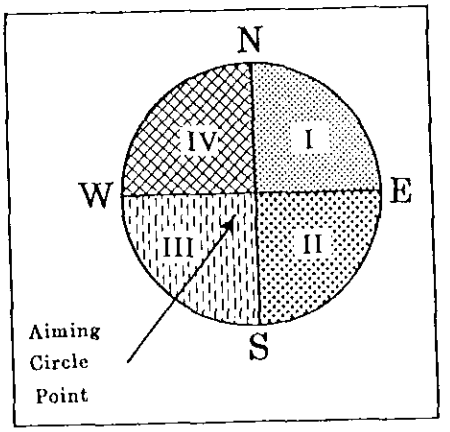

Figure 1

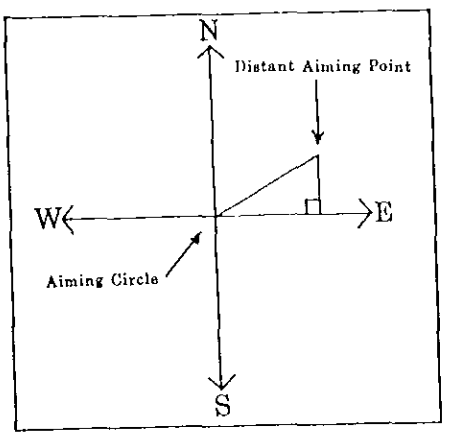

Figure 2